REMARKS

Status of the Claims

- Claims 1, and 3-10 are pending in the Application after entry of this amendment.
- Claims 1, and 3-10 are rejected by Examiner.
- Claim 1 is amended by Applicant.

Drawing Objections

Figure 3 is objected to because it is confusing. In particular, the line interconnecting steps E13 and E9 makes the Figure 3 unclear.

In response, the Applicant provides a replacement Figure 3, where it is clearly indicated that steps E13 and E9 both join the arrow that links step E5 to step E8. This is supported by the specification, p. 7, lines 30 – 33, which description corresponds to the sequence of step E8, NO, step E9, NO, step E8, YES, step E12:

> "*In the case where the timeout has not expired, we wait for it to expire or for a new reset message to arrive (E9). If it expires before the arrival of a new reset message, the message and the associated topology (E12) are transmitted as previously.*"

and page 8, lines 7-9, which description corresponds to the sequence of E11, E13, E8:

> *Next, the question arises of ascertaining whether the direction index previously stored was "none" and in this case we return to standby awaiting the timeout (E8).*

Applicant submits that no new matter is added as a result of this amendment. Applicant respectfully requests reconsideration and withdrawal of the objection to the drawing as a result of the amendments.

Claim Rejections Pursuant to 35 U.S.C. §112

Claim 1 and 3-8 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement.

Regarding Claim 1, the Examiner asserts that the claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, and that the original specification does not adequately describe how the bridge head is connected to the transparent bridge. The Examiner further asserts that that according to the specification, the bridge heads are connected to a transparent network [See specification, page 5 lines 12-25] and that from the cited portion of the specification, it appears that the bridge heads are the transparent bridges.

In response, Applicant amends Claim 1, adding the phrasing "a network interconnecting bridge heads, said network being referred to as" a transport bridge, thereby clarifying that the network interconnecting the bridge heads is referred to as a transparent bridge.   The phrasing is according to what is described by the original specification, as one skilled in the relevant art will also understand from the specification at page 2, lines 13-18, where it is explained that the term 'transparent bridge' is for example a wireless network or any other type of network:

> "*The concept of transparency being understood to mean the fact that the nodes of the network see a single virtual network composed of all the buses interconnected by the bridge. The bridge may be composed for example of a wireless network implementing the 802.11 standard or the HiperLAN2 standard, but it may also consist of any other type of network that is conceivable.*" (See present specification, col. 2, lines 13-18).

and further on at page 2, lines 27-30, where it is mentioned that the "other network" is equivalent to "the transparent bridge" :

> "*In the remainder of the document, we shall refer to a 1394 physical bus containing a bridge head as a "bus", the other network connecting the bridge heads and allowing the interconnection of the busses as a "bridge"....* (See present Specification, page 2, lines 27-30)

This is also clear from the as-filed Specification on page 5, lines 12-25, that explains the notion of transparent bridge with the help of Figure 1, where the

"other network" with reference (4) interconnects several 1394 buses that each contains a bridge head (1), which bridge head is connected to the 1394 bus and to the other network i.e. the transparent bridge. "

That the "other network" is equivalent to "the transparent bridge" as described in the as-filed Specification at page 2, lines 27-30. This is not contradicted by the as-filed Specification on page 5, lines 12-22 which reads:

> "*Figure 1 represents a network composed of several 1394 buses interconnected by any other network (4). This other network may be a wireless network... For the 1394 devices connected to a bus, the other network may be transparent, ...*" (See present Specification, page 5, lines 12-22.)

The Applicant respectfully disagrees with the Examiner that the original specification does not adequately describe how the bridge head is connected to the transparent network and respectfully submits that the original specification does indeed adequately describe how the bridge head is connected to the transparent network. With the clarification of Claim 1, for which there is clear support in the specification as shown above, it is believed that these amendments overcome the Examiner's rejection of Claims 1 and 3-8 under 35 U.S.C. 112 first paragraph.

Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. § 112 rejection of Claims 1, and 3-8 in light of the amendment and remarks herein.

Claim Rejections Pursuant to 35 U.S.C. §103

Claims 1 and 8-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Application No. WO 02/33902 to Straub et al. (Straub) in view of U.S. Patent No. 6,160,796 to Zou. Applicant respectfully traverses the rejection.

The Applicant agrees with the current Office Action, page 4 that "Straub does not disclose only transmitting a reset message when an alternation in the change of the number of nodes occurs".

However, Applicant respectfully disagrees that Zou discloses the elements of pending Claim 1 that do not appear in Straub. According to Zou at col. 12 lines 10-15, there is no transmission of bus reset messages. Instead, Zou teaches that

notification of the changes in topology is sent to the Event Manager. As stated in Zou:

> "*Since any topology change within 1394 bus will cause a bus reset to occur, the CMM 250 is informed of these changes and notifies the event manager 214 of these changes and notifies the Event Manager 214 of these changes along with the information about the devices that have disappeared as well as those that have become available.*" (Zou, col. 12, lines 10-15).

Thus, according to Zou, there is no selective transmission of bus reset messages as recited in pending Claim 1, but rather Zou describes transmission of topology changes via callback handlers to interested devices or applications. As stated in Zou, col. 12 lines 15-18:

> "*The Event Manager 214 then distributes the related event to all interested HAVi entities or applications that previously established the proper call back handlers.*"; (Zou, col. 12, lines 15-18).

Thus, Zou does not at all disclose selective transmission of bus reset messages. Zou is not concerned about reducing the number of bus reset messages that are transmitted. Rather, Zou is interested in supporting hot plugging and hot unplugging of devices to the user level. As stated in Zou, col. 12 lines 1-7:

> "*One of the advanced features the 1394 bus provides to the HAVi architecture is its support for dynamic device actions such as hot plugging (device insertion or power up) and unplugging (device removal or power down). To fully support this to the user level, high level software clients need to be aware of these environment changes and the present invention* [of Zou] *provides this information.*" (Zou, col. 12, lines 1-7).

Thus, Zou does not solve the problem solved by the features of the presently claimed invention, that is, how to reduce the number of bus reset messages transmitted between buses interconnected via a transparent bridge. In contrast to the presently claimed invention, Zou does not reduce the transmission of bus reset messages.

The current Office Action, on page 4, further cites Zou col. 2 lines 12-21, indicating that it would have been obvious to a person of ordinary skill in the art

to only transmit bus resets that are caused by an alternation of change of direction in Straub's invention to conform to the IEEE 1394 standard. Applicant respectfully disagrees.

The cited paragraph of Zou merely describes that according to the IEEE 1394 standard, bus resets are caused by inserting a new device onto a bus, or powering it on, or by removing an existing device from a bus, or powering it down. Zou, which does not describe the transmission of bus resets, but rather the transmission of topology information, does not constitute any teaching for the skilled in the art of how to reduce the number of bus resets transmitted between buses interconnected via a transparent bridge and thus does not comprise any teaching for the skilled in the art that would be applicable to Straub.

Since the combination of Staub and Zou fails to teach or suggest the Claim 1 aspects of transmission to one or more other buses interconnected on a transparent bridge of reset messages occurring on a first bus only when caused by an alternation in the change of the number of nodes, then the combination of Staub and Zou cannot render Claim 1 obvious under 35 USC §103 because the cited art does not contain all of the elements of patentably distinct pending Claim 1. Also, since Claims 8-10 depend on patentably distinct Claim 1, then dependent Claims 8-10 are likewise patentably distinct over the combined cited art per MPEP §2143.03. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. §103 rejection of pending Claims 1 and 8-10.

Claims 4 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Application No. WO 02/33902 to Straub et al. (Straub) in view of U.S. Patent No. 6,160,796 to Zou, and in further view of US Patent No. 6,466,549 to Hattig. Applicant respectfully traverses the rejection.

The teachings of Straub and Zou with respect to the pending independent Claim 1 are discussed above. Hattig discusses a method and apparatus for providing broadcast discovery information, in a network having one or more 1394 buses, upon either a reset of the bus or a receipt of a solicit packet sent to all devices in the network by a discovering device.

However, like Straub and Zou, Hattig also fails to discuss the Claim 1 aspects of transmission to one or more other buses interconnected on a

transparent bridge of reset messages occurring on a first bus only when caused by an alternation in the change of the number of nodes. Accordingly, the addition of Hattig to the combination of Straub and Zou also does not render pending independent Claim 1 obvious because all elements are not found in the combination of the three cited references. Since Claims 4 and 6 depend on patentably distinct Claim 1, then Claims 4 and 6 are likewise patentably distinct from the three cited references per MPEP per §2143.03.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. §103 rejection of pending Claims 4 and 6.

Applicant notes that dependent Claims 3, 5, and 7 did not receive any prior art rejections in the current final Office Action.

Conclusion

Applicant respectfully submits that the amended pending claims patentably define over the cited art and respectfully requests reconsideration and withdrawal of all rejections of the pending claims based on the amendments and arguments above.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 07-0832 therefore.

Respectfully submitted,

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